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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,609	11/04/2004	Kenichiro Aridome	258782US6PCT	7461
22850	7590	06/02/2008		
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER NEGRON, WANDA M	
			ART UNIT 2622	PAPER NUMBER
			NOTIFICATION DATE 06/02/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/511,609	Applicant(s) ARIDOME ET AL.	
	Examiner WANDA M. NEGRON	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 and 30-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18, 30-51 is/are rejected.
- 7) ☒ Claim(s) 10,31 and 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

Replacement drawings were received on 12/04/2007. These drawings are acceptable.

Claim Objections

Amended **claims 10 and 32** recite in each respective last line, “in each predetermined decoding/reproduction units”. It is unclear which “predetermined decoding/reproduction units” are being referred to in the claims. The replacement phrase “in each of predetermined decoding/reproduction units” or “in respective predetermined decoding/reproduction units” is suggested.

Amended **claim 31** recites in lines 1-3, “[a] reproduction apparatus for a recording medium having recorded thereon said reproduction apparatus comprising:”, which is unclear. Because of a similar recitation in the preamble of amended claim 30, it is believed lines 1-3 of claim 31 should read “[a] reproduction apparatus for a recording medium having recorded thereon”. Appropriate correction is required.

It is noted that double brackets markings are used in some amended claims to show deletion, and, in addition, double brackets markings are used in other amended claims to show added text. “The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-

through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived.” See MPEP § 714. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-51 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Newly amended independent claims 1, 10 and 30- 32 disclose that the management information and the additional information are next to each other “in at least one of logical and physical positions”. The specification as filed does not support the limitation of having the management information and the additional information next to each other in a physical position.

Any claim not specifically addressed above, is being rejected as incorporating the deficiencies of a claim upon which it depends.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 33 and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 33 and 37 recite the limitation "said video information" in respective line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 30 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Tahara et al. (WO00/46989). Because the document is in Japanese, the Examiner is also making of record Tahara et al. (US 6,671,323), which is the English translation of the original Japanese document. All citations will refer to locations in the English '323 document for ease of prosecution.

Regarding **claim 30**, Tahara discloses a reproduction apparatus (*i.e.*, decoding system including MPEG decoder 170A connected to TV set 170B; see figure 4) having recorded thereon (*i.e.*, storing in a temporary buffer memory 401; see figure 31) compressed time-series information (see col. 22, line 19 to col. 23, line 35), management information for a decoding/reproduction process to data included in each of decoding/reproduction units of said time-series information (see figures 30C-30D), and additional information that is supplemental information regarding said time series information (see col. 23, line 59 to col. 24, line 14), said management information and said additional information being recorded next to one another in at least one of logical and physical positions (see figure 20, 21 and 26), the reproduction apparatus comprising:

(a) means for reading out compressed time-series information and additional information (figure 31);

(b) means for separating the compressed time-series information and the additional information (figure 31);

(c) means for decompressing the compressed time-series information by using management information (figure 31; column 23, line 59 to column 23, line 14);

(d) means for reproducing and outputting the decompressed time-series information by using management information (figure 31; column 23, line 59 to column 23, line 14); and

(e) means for reproducing and outputting the additional information in synchronization with reproducing and output of the decoding/reproduction unit of the

time-series information by using management information (figure 31; column 23, line 59 to column 23, line 14).

Claim 31 has limitations similar to those treated in the above rejection of claim 30, and are met by the reference as discussed above. Claim 31, however, also recites the following limitations, which are met by the reference as follows:

(e) means for reproducing the additional information in synchronization with reproducing and output of the decoding/reproduction unit of the time-series information by using management information, and controlling data of one of the decoding/reproduction units on the basis of the additional information (see Tahara, figure 31; col. 23, line 59 to col. 23, line 14).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18 and 32-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tahara et al. (WO00/46989), hereinafter referred to as Tahara, further in view of applicant's admitted prior art. As above, all citations will refer to locations in the English '323 document for ease of prosecution.

Regarding **claims 10 and 32**, Tahara discloses an encoding apparatus wherein input video data having image data and ancillary data associated with the video data is received and encoded using MPEG technology, the encoding system comprising a data compression means (*i.e.*, MPEG encoders 142; see col. 1, lines 22-24; col. 7, lines 26-34) for carrying out data compression on time-series information (*i.e.*, the input video data which comprises time-series information, *i.e.*, time-sequential image data; see col. 3, lines 51-65); and management-information generation means (*e.g.*, a field counter 102 for outputting PTS and DTS time stamps and a field identifier and line number; col. 8, lines 9-15 and col. 17, lines 30-43) for generating management information for use in a decoding/reproduction process for decoding and reproducing said time-series information (see figures 30A-30D). Tahara also discloses an additional-information separating means (*i.e.*, ancillary data separating circuit 101; see column 7, lines 36-50) for extracting additional data (*i.e.*, supplemental information regarding the input video data; see column 7, lines 51-64) from the input video data; and an MPEG encoded data structure wherein the management information and the additional information are next to each other in logical position (see figures 20, 21 and 26) in respective predetermined decoding/reproduction units (*i.e.*, MPEG encoded data structure comprising a sequence layer, a GOP layer and a picture layer; see figure 26).

Tahara, however, does not explicitly disclose that said encoding system is used in a computer implemented recording apparatus comprising data inputting means for inputting time-series information; additional-information generation means for generating additional information that is supplemental information regarding said time-

series information; and recording control means for recording said time-series information once compressed on a recording medium, and recording said management information and said additional information next to each other on said recording medium.

Applicant, on the other hand, discloses as admitted prior art, that the conventional MPEG method is adopted “as a data compression method” for recording a moving picture and associated additional information onto a recording medium in a computer implemented recording apparatus (*i.e.*, a digital camera; see specification as filed, page 4, last paragraph). It would have been inherent to include in the camera a data inputting means for inputting time-series information (*i.e.*, an inherent image pickup device required to generate input video data, which comprises time-series information, *i.e.*, time-sequential image data) in order for the digital camera to be “capable of taking” a “moving picture” (see specification as filed, page 4, last paragraph). Applicant also discloses as admitted prior art that a digital camera comprises an additional-information generation means for generating additional information to “be recorded onto a recording medium” (see specification as filed, page 5, lines 2-18), and that the MPEG method requires that “management information for decoding and reproduction is added to each decoding/reproduction unit... and recorded onto a recording medium along with the coded image data” (see specification as filed, page 4, lines 11-22). It would have been inherent to include a recording control means in the disclosed digital camera for recording said time-series information, once compressed, on the disclosed recording medium, and for recording the management information and the additional information

on said recording medium. When implementing the encoding system of Tahara in the digital camera disclosed by applicant as admitted prior art, the management information and the additional information would be recorded next to each other on said recording medium according to the MPEG encoded data structure taught by Tahara.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the encoding apparatus disclosed by Tahara for encoding management information and additional information in the conventional camera system described by applicant as admitted prior art because, when MPEG encoding and decoding is repeated, the ancillary data added to the video data in the camera system will not be lost (see Tahara, col. 3, lines 19-27 and lines 51-58).

Regarding **claims 11 and 33**, Tahara in view of applicant's admitted prior art discloses that the inherent recording control means generates data including a plurality of the decoding/reproduction units of said time-series information as data of a read/write unit serving as a unit, in which data is written onto said recording medium and read out from said recording medium (see applicant's specification as filed, page 3, line 3 – page 4, line 15); and the sequence of pieces of data included in the decoding/reproduction units pertaining to the read/write unit in a time-series direction is changed (see applicant's specification as filed, prior art figures 9A-9B).

Regarding **claim 12**, Tahara in view of applicant's admitted prior art discloses that the management information is time management information (see Tahara, col. 8, lines 9-15, and figures 30A-30D).

Regarding **claims 13 and 34**, Tahara in view of applicant's admitted prior art discloses recording additional information by placing management information at a predetermined location of the read/write unit (see Tahara, figure 26).

Regarding **claims 14 and 35**, Tahara in view of applicant's admitted prior art discloses that data of the read/write unit comprises a plurality of packets (see Tahara, column 6, lines 60-63 and figure 27); and additional information is recorded in data of the read/write unit as a packet including management information (see Tahara, figure 26 and col. 20, line 36 to col. 21, line 38).

Regarding **claims 15 and 36**, Tahara in view of applicant's admitted prior art discloses that data of the read/write unit comprises a plurality of packets (see Tahara, column 6, lines 60-63 and figure 27); a specific packet is selected among packets of time series information (see Tahara, figures 7C and 28, col. 20, lines 35-64); and additional information is recorded at a location relative to the specified packet including management information (see Tahara, figures 7C and 26, column 17, lines 14-29).

Regarding **claims 16 and 37**, Tahara in view of applicant's admitted prior art discloses that additional information includes at least information on a time at which data of the time-series information is acquired (see Tahara, column 7, lines 62-64).

Regarding **claims 17 and 38**, Tahara in view of applicant's admitted prior art discloses that additional information includes at least information on a condition (*i.e.*, a location) at which data of the time-series information is acquired (see Tahara, column 7, lines 62-64).

Regarding **claims 18 and 39**, Tahara in view of applicant's admitted prior art discloses that:

(a) the time-series information is video information (see Tahara, column 7, lines 4-6);

(b) data of the decoding/reproduction unit is information of a frame unit (see Tahara, figures 30A-30D); and

(c) the data compression uses a correlation (predictive coding) with data of the decoding/reproduction unit (see Tahara, column 1, lines 22-37).

Method **claims 1-9** are drawn to the method of using the corresponding apparatus claimed in claims 10-18. Therefore method claims 1-9 correspond to apparatus claims 10-18 and are rejected for the same reasons of obviousness as used above.

Regarding **claims 44 and 48**, Tahara in view of applicant's admitted prior art discloses that a data size of each additional information is constant (*i.e.*, 22-bit ancillary data; see Tahara, figure 21).

Regarding **claims 45 and 49**, Tahara in view of applicant's admitted prior art discloses that said additional information follows said management-information in a logical position (see Tahara, figures 20, 21 and 26).

Regarding **claims 46 and 50**, Tahara in view of applicant's admitted prior art discloses that said additional information includes time information of said time-series information (see Tahara, col. 7, lines 39-42 and 62-64).

Regarding **claims 47 and 51**, Tahara in view of applicant's admitted prior art discloses that said additional information includes condition information of said time-series information being generated (see Tahara, col. 7, lines 50-64).

Method **claims 40-43** are drawn to the method of using the corresponding apparatus claimed in claims 44-47. Therefore method claims 40-43 correspond to apparatus claims 44-47 and are rejected for the same reasons of obviousness as used above.

Response to Arguments

Applicant's arguments with respect to claims 1-18 and 30-39 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WANDA M. NEGRON whose telephone number is (571) 270-1129. The examiner can normally be reached on Mon-Fri 6:30 am - 4:00 pm alternate Fri off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Wanda M. Negrón/
Examiner, Art Unit 2622
May 22, 2008

/David L. Ometz/
Supervisory Patent Examiner, Art
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